subject will rule about half-a-dozen columns in their common-place book, and, under the head of drains and sewers, collect and enter in their respective columns the pages in THE BUILDER referring to those heads which are important (and the index will help them much), they will find they have a map of valuable information on the subject, which I do not think they can find elsewhere; they will find, I think, that facts are the things we want collected now,—other parts have been pretty well sifted; but why what answers well in fifty cases does not in the fifty-first, wants exposing, so that the right remedy may be applied.

A. P. M.

DOINGS IN DERBY.

A MEMORIAL has just been placed in All Saints' Church, Derby, to the memory of the late Mr. Rawlinson, artist of that town; it consists of a tablet surmounted by a figure of Faith; executed by Mr. Loft, of London.——The second experimental trip on the Manchester, Buxton, Matlock, and Midland Junction Railway took place on Monday, in last week, under the direction of Mr. G. R. Stephenson and Mr. Campbell, the resident engineer. The trains consisted of one first-class and one second-class carriage. The whole length run over was in excellent working order, and the train ran very smoothly. On passing through the Willersley tunnel some blue and crimson fire was lighted, which had a fine effect. The line is now open for traffic.——A new bridge of two arches has just been completed across the large brook running through Derby. A new bridge is also in course of erection at the same place, spanning the river Derwent. Towards defraying the cost of the latter, Mr. Alderman Moseley has contributed 500*l*.——A new gallery has just been erected in St. Mary's Church, Little Darley! —— The stained glass in the chancel window of St. Peter's Church, Derby, consists of a figure of our Saviour on the Cross; on his right, those of St. Peter and the Virgin Mary; on his left, St. John and Bishop Chad. Some of the good people ask why they should have a Romish bishop made so prominent. They also object that the Saviour is represented smiling, when we know that his sufferings on the Cross were of the most agonizing description. The window was put up by Mr. Barker, of York. The tracery above is to be filled in with plain yellow stained glass, and the whole (with exception of tracery) is the gift of a lady.

REMOVAL OF SMOKE OF TOWNS.

I OBSERVE in a recent number a notice of a recently published pamphlet by Mr. Flockton, on a proposed method for obviating the discharge of smoke into the atmosphere from dwelling-houses and manufactories by means of underground flues in the streets, leading to lofty towers or chimney stacks out of the town; and for readily obtaining in this way a more perfect ventilation of sewers.

Perhaps you will permit me to trespass on your columns with a suggestion on this subject which has long occupied my thoughts, viz., that the sewers themselves should be made use of for the purpose of such underground flues, by employing the upper part, now the receptacle of the noxious gases generated in them, for the underground passages for smoke, in passing along which the coldness of the water beneath would cause part of the soot to precipitate, and be carried to the outlet of sewage water, with the other refuse; while the uncondensed smoke would be drawn out by mechanical or other means, and discharged at chimney shafts erected in the most convenient places at a distance from the town.

A paper on this subject was drawn up by me in January last, without any previous knowledge of Mr. Flockton's, or any other such plan; and with the view of obtaining a more competent opinion of its practicability before venturing to publish so seemingly extravagant an idea, I submitted it to an eminent engineer, Mr. Farey. The method of procuring a sufficient draught by the heat contained in the smoke itself was considered by that gentleman wholly impracticable,* owing to the cooling effect of long underground flues, and particularly of damp sewers, upon the smoke passing through them. The general idea, however—one which had many years ago occurred to Mr. Farey himself—was thought not unworthy of consideration, and, to a certain extent, practicable, provided adequate means for producing the draught were employed; such, for example, as are adopted in the ventilation of extensive mines.

I hope the desire to avoid encroaching too much on your space has not rendered this communication obscure. I make it that "those of your readers interested in the question to which it refers may know" what others are contemplating, and in furtherance of the object—the public benefit—evidently aimed at by you, which appears also to be the laudable aim of Mr. Flockton.

GEORGE DEVEY.

* This, I perceive, is also your opinion. BUILDER, No. 272, page 223.

CONVEYANCE OF WATER. CONSTANTINOPLE.

YOUR correspondent "Spec.," p. 236, misunderstands the nature of the question asked in a former number of THE BUILDER, and the reply given; the allusion to the hydrostatical pressure referred to the earthern pipes connecting the souterazi together, and not to the leaden pipes in the souterazi themselves.

The cistern or reservoir formed at intervals must necessarily relieve the hydraulic pressure; as, if water is to be brought from an altitude of 1,000 feet, and it descends in stages of 100 feet into reservoirs at those intervals, your correspondent must admit that the pressure upon the pipes connecting the reservoirs together will be less than if the water is conveyed down in one continued conduit.

Although the stone-ware pipes of the present day will bear a pressure of a column of water equal in altitude to from 300 to 400 feet, I imagine that in those days (probably in the year 404), the ancients were not so well acquainted with the manufacture of those articles as in the present day, although they show by their works they were not totally unacquainted with the science of hydraulics.

There is a tendency to return now to the use of earthen pipes as conduits for water in preference to iron, probably on the ground of economy; but if it be true, as I hear from Aberystwith, that vegetation occasionally takes place inside them, it will be an obstacle fatal to their use. For the information of your correspondent, I may further state that earthenware pipes can be manufactured 3 feet diameter (although manufacturers prefer making the smaller sizes), and their use must be regulated by the hydrostatical pressure they will bear, which has a limit in that material as well as iron; the joints of the pipes in towns where they have been used, were made secure with cement.

B. BAYLIS.

Miscellanea.

DRYING CLOSETS.—Amongst other letters received by us on this subject is one from Mr. A. Jennings, on the part of the Dessicating Company, objecting *in toto* to the *close* system, but containing nothing to controvert the experiments of former correspondents. He says, "it does appear to me most extraordinary that such a principle should for one moment be contended for. The water (in probably foul or infected blankets) converted into noxious vapour, for want of a proper current to carry it away, is to a great extent dried up in the articles themselves! Is this the way to obtain pure linen? Those who happen to be of such opinion had better consult the works of Dr. Henry, of Manchester, Dr. Copland's Medical Dictionary, vol xi., page 245, and, more recently, the Medical Gazette of Feb. 2, 1849, where they will find that impelled rapid currents of dry heated air are the requisites for insuring perfect drying as well as perfect disinfecting. As to a chamber of 300 feet or even 5,000 feet cubic capacity, it is as nothing compared with those now in daily use upon the desiccating principle in the manufacturing districts and elsewhere. In some cases these chambers contain upwards of 30,000 cubic feet."

PROJECTED WORKS.—Advertisements have been issued for tenders, by 9th inst. (extension of time), for the works required for West Ham Parish Church; by 11th, for building about 100 feet of wall round the head of the Middle Dock, Rotherhithe; by 18th, for making two oval sewers at Bristol; by 19th, for the erection of a new congregational church in the City-road; by 25th, for the erection of the new York County Hospital; by 12th for rebuilding St. Mary's Church, Foulness Island, Essex; by 29th, for the erection of a stone bridge at Vowchurch, Hereford; by 12th, for the erection and completion of a stone warehouse at Bradford; by 21st, for the erection of a police station at Ormskirk; by 23rd, for alterations and additions to the Peterborough Union Workhouse; by 11th, for the erection of extensive farm buildings at Kirtling, Cambridgeshire; by 22nd, for building a sewer at Birmingham; by 12th, for sinking an engine shaft at the Dudley Waterworks; by 12th, for supplying and fixing a galvanized corrugated iron roof to a large tank at St. Pancras Workhouse; by 19th, for hewed wedges of beech for the navy at Portsmouth; by 12th, for mineral black for paint for the navy; by 16th, for various works in churches, &c., in St. Marylebone, and for flints, cement, lime, hammers, &c., for same parish. Tenders also wanted by 21st for surveying and mapping a township in Whalley Parish, Lancashire.

INSTITUTION OF CIVIL ENGINEERS.—On Tuesday, June 5, Mr. Field, president, in the chair, the paper read was a "Description of a Method of Rolling Bars for Suspension Bridges, and other-like Purposes," by Mr. Thomas Howard. It was described that by the ordinary process of manufacture, the head, or end of the link, out of which the eye, or hole for the connecting pin, was bored, had been sometimes welded on to a parallel rolled bar, or, at other times, been hammered to the required form; both these methods were, however, objectionable, owing, in the former case, to the insecurity, and in the latter to the tediousness and expense. By the method introduced by Mr. Howard, the bars were rolled at once into the requisite form; the shingle, or faggot, was first passed longitudinally, at a welding heat, through grooved rollers, in the ordinary manner, and then, before being drawn down to the intended thickness, was carried to rollers having bosses, or increased diameters at the places corresponding to the heads to be produced, and there passed to and fro between the rollers transversely, or across the breadth of the bar, thus receiving a pressure only at the enlarged parts of the rollers, which gave the necessary increase of breadth at the heads; it was then taken to plain finishing rollers, and drawn out longitudinally in the usual manner, until it attained the required length and thickness; the heads being afterwards trimmed by machinery to the exact dimensions, and the holes drilled for the pins. It was stated that the chains of the large suspension bridge, erected by Mr. W. Tierney Clarke over the Danube, at Pesth, which lately so satisfactorily withstood the heavy strain brought upon it by a retreating army, were constructed on this system.

SMITHFIELD MARKET.—The protracted inquiry of the Parliamentary committee into the eligibility of Smithfield-market is about to be brought to a close. The last few sittings of the committee have been principally occupied with the evidence of some of the principal butchers, graziers, and salesmen of the metropolis and the market, who are in favour of the continuance of Smithfield, on account mainly of its central situation, and its proximity to their premises and slaughter-houses.

THE METROPOLITAN ROADS.—The twenty-third report of the Commissioners of the Metropolitan Roads states that the receipts from tolls during the past year amounted to 64,019*l*. and the total receipt from all sources of income, including the balance in hand on the 25th of March, 1848, to 71,036*l*. The total concurrent expenditure amounted to 68,773*l*., including the interest and the instalment of the mortgage debt. The state of the roads on Sunday last, at the west end of the metropolis, for want of watering, was abominable. Why health and property should not be protected on a Sunday as on another day, it seems hard to say.

To learn about PDF Compression and OCR visit ThePaperlessOffice.org